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To: Stephanie Andreescu and Carrie Traver, EAID, OEP

From: Margaret Passmore and Amy Bergdale, EAID, OMA

Re: Trans Energy Lucey Pad Impoundment Field Visit on 01/18/2012

Date: 1/30/2012

On January 18, 2012, M. Passmore and A. Bergdale accompanied S. Andreescu and C. Traver on an inspection of the Trans Energy Inc. Lucey Pad Impoundment site in Marshall County, WV. We did not perform surveys using the NC DWQ Stream Identification Forms (Version 4.11) during the site visit, because the area received approximately 0.5 inches of precipitation from 01/16 to 01/17. The NC DWQ protocol indicates that streams should not be evaluated within 48 hours of rainfall that results in surface runoff (NC DWQ 2010).

We performed short visual searches (1 biologist hand picking for ~10 minutes per site) for aquatic macroinvertebrates. The locations were all located on unnamed tributaries (UNTs) of Burch Run and are shown in Figure 1. The table below summarizes the macroinvertebrate taxa we found. These taxa are typically found in good quality, spring-fed headwater streams (OH EPA 2012, NC DWQ 2010, Stewart and Stark 2002, Wiggins 1996). Ephemeral streams generally lack obligate aquatic invertebrates. Based on the abundance, diversity and type of aquatic macroinvertebrates found in these streams, these streams are relatively permanent waters.

The watershed areas upstream of these sites are also provided in Table 1. Watershed areas of this size support relatively permanent flow, often spring-fed perennial flow, in the Western Allegheny Plateau ecoregion where this site is located (Pond and Passmore 2008).

WVDEP sampled Burch Run near the mouth on 7/26/2000 (see location on Figure 1). The family level WV Stream Condition Index score was 83.3, indicating a condition highly comparable to regional reference conditions (> 25<sup>th</sup> % of reference site scores) in WV (Gerritsen et al. 2000).

NOAA estimates that the region where the Trans Energy Lucey Pad site is located is 125-150% over normal rainfall for the past 365 days (see Figure 2).

Table 1. Macroinvertebrate Taxa found in Watercourses at Trans Energy Lucey Pad Site (NR indicates information was not recorded).

Stream ID	Watershed Area (acres)	Stream Width (m)	Stream Depth (m)	Spec. Cond. (µS/cm)	Taxa Found	Flow Designation
UNT 2	16	1.2	0.15	188	Ephemeroptera, Heptageniidae, <i>Epeorus</i> Ephemeroptera, Heptageniidae, <i>Maccaffertium</i> Trichoptera, Hydropsychidae, <i>Diplectrona</i> Trichoptera, Goeridae, <i>Goera</i> Diptera, Tipulidae, <i>Tipula</i>	Perennial with well developed obligate aquatic fauna
UNT 3	157	1.1	0.3	194	Ephemeroptera, Heptageniidae, Epeorus Ephemeroptera, Baetidae, Baetis Plecoptera, Capniidae, Allocapnia Plecoptera, Capniidae, Paracapnia Plecoptera, Perlodidae, Clioperla Plecoptera, Perlodidae, Diploperla Trichoptera, Goeridae, Goera Trichoptera, Limnephilidae, Pycnopsyche Diptera, Simuliidae, Prosimulium Diptera, Chironomidae, Tvetenia	Perennial with well developed obligate aquatic fauna
UNT 1 US	199	1.2	0.6	204	Ephemeroptera, Heptageniidae, <i>Epeorus</i> Ephemeroptera, Ephemerellidae, <i>Ephemerella</i> Plecoptera, Chloroperlidae, <i>Sweltsa</i> Plecoptera, Peltoperlidae, <i>Peltoperla</i> Trichoptera, Hydropsychidae, <i>Cheumatopsyche</i> Trichoptera, Thremmatidae, <i>Neophylax</i>	Perennial with well developed obligate aquatic fauna
UNT 4	10	NR	NR	NR	Ephemeroptera, Heptageniidae, <i>Epeorus</i> Plecoptera, Peltoperlidae, <i>Peltoperla</i> Plecoptera, Chloroperlidae, <i>Sweltsa</i> Trichoptera, Limnephilidae, <i>Pycnopsyche</i> Diptera, Tipulidae, <i>Tipula</i>	At least intermittent; could be perennial; with well developed obligate aquatic fauna

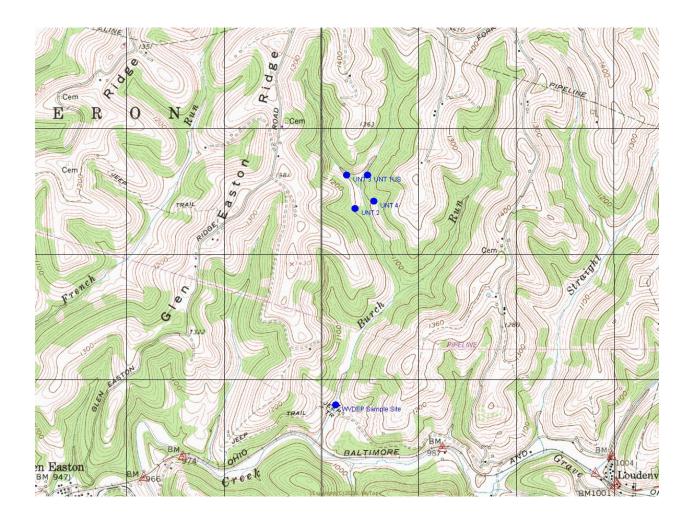
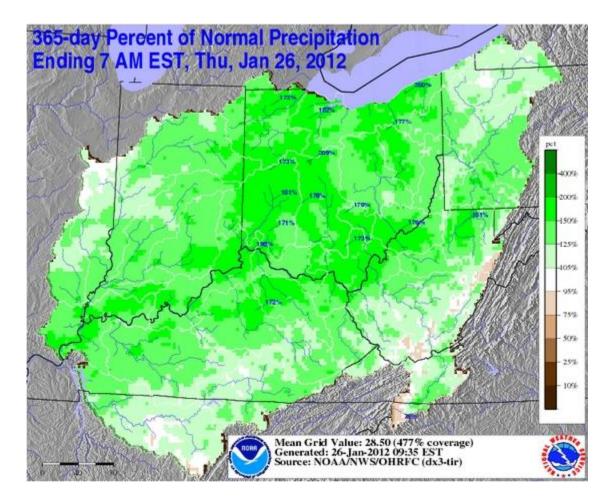


Figure 1. Locations of EPA sampling sites on unnamed tributaries to Burch Run (sampled on 01/18/2012) and WVDEP sampling site on Burch Run (sampled on 07/26/2000).



http://www.erh.noaa.gov/er/ohrfc/HAS/images/latest 365 day depart.jpeg

Figure 2. 365-day Percent of Normal Precipitation

## References:

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Pond GJ and Passmore MP. 2008. Issue Paper: Recommendations for determining Relatively Permanent Waters (RPWs) in Headwater Streams in the Huntington and Pittsburgh Corps Districts. US EPA, Wheeling, WV.

Stewart KW and Stark BP. 2002. Nymphs of North American Stonefly Genera (Plecoptera). The Caddis Press, Columbia, Ohio.

Wiggins GB. 1996. Larvae of the North American Caddisfly Genera (Trichoptera), 2<sup>nd</sup> Ed. University of Toronto Press, Toronto, Canada.